

## **REMARKS**

The Applicants have carefully reviewed the Final Office Action mailed February 22, 2007 and offer the following remarks.

Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by “Use of the acousto-optic tunable filter for optical spectrum analysis and EDFA power equalization in WDM systems,” by *M.L. Heston et al.*, OFC '96 Technical Digest, 1996, at pages 249-250 (hereinafter “*Heston*”). The Applicants respectfully traverse the rejection.

According to Chapter 2131 of the M.P.E.P., in order to anticipate a claim under 35 U.S.C. §102, “the reference must teach every element of the claim.” The Applicants respectfully submit that *Heston* does not disclose each and every element recited in claim 1. Accordingly, *Heston* cannot anticipate this claim.

In particular, claim 1 recites a method of measuring optical signal power comprising, among other features, “receiving optical signals at a wavelength select switch.” The Applicants respectfully submit that *Heston* does not disclose a wavelength select switch, much less receiving an optical signal at a wavelength select switch. In maintaining the rejection, the Patent Office states that *Heston* discloses a polarization-independent acousto-optical tunable filter (PIAOTF) and somehow equates the PIAOTF with a wavelength select switch.<sup>1</sup> The Applicants respectfully disagree. As is well known, an AOTF is a filter that uses ultrasonic waves generated in an optical material to analyze an optical spectrum. An AOTF is not a wavelength select switch. In fact, the PIAOTF described in *Heston* is being used as an optical spectrum analyzer, not as a wavelength select switch. Therefore, *Heston* does not disclose a wavelength select switch nor does it disclose receiving optical signals at a wavelength select switch. As such, the Applicants submit that claim 1 is patentable over *Heston* and request that the rejection be withdrawn.

Claims 1, 3-5, 7, 10-12, 14-18, 24, and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,873,795 B1 to *Sugaya* (hereinafter “*Sugaya*”) in view of U.S. Patent Application Publication No. 2002/0176658 A1 to *Prohaska* (hereinafter “*Prohaska*”) and further in view of U.S. Patent No. 5,986,782 to *Alexander et al.* (hereinafter “*Alexander*”). The Applicants respectfully traverse the rejection.

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<sup>1</sup> See Final Office Action mailed February 22, 2007, page 2.

According to Chapter 2143.03 of the M.P.E.P., in order to “establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” The Applicants submit that none of the references, either alone or in combination, discloses or suggests all the features recited in claims 1, 3-5, 7, 10-12, 14-18, 24, and 25.

More specifically, claim 1 recites a method of measuring optical signal power comprising, among other features, “displaying an indication of the optical signal power in the optical signals on a monitor to a system administrator.” The Applicants submit that none of the references, either alone or in combination, discloses or suggests displaying an indication of an optical signal power on a monitor. As correctly pointed out in the Final Office Action, neither *Sugaya* nor *Prohaska* discloses or suggests this feature.<sup>2</sup> In maintaining the rejection, the Patent Office states that it is well known in the art to include an optical indicator to signal system status.<sup>3</sup> In supporting this conclusion, the Patent Office asserts that *Alexander* discloses a local alarm 59 and somehow equates the local alarm with displaying an indication of an optical signal power on a monitor.<sup>4</sup> The Applicants respectfully disagree. While *Alexander* does disclose that when a signal-to-noise ratio falls below a level, a local alarm 59 may be signaled by a microprocessor 58, *Alexander* does not disclose or even suggest displaying an indication of an optical signal power on a monitor.<sup>5</sup> In fact, *Alexander* makes no mention or even suggests a monitor nor does it disclose or suggest displaying anything, much less displaying an indication of an optical signal power. Therefore, claim 1 is patentable over the cited references and the Applicants request that the rejection be withdrawn. Claims 3-5, 7, 10, and 11, which depend from claim 1, are also patentable for at least the same reason along with the novel features recited therein.

Claim 12 recites an apparatus for measuring optical signal power comprising, among other features, “a monitor for displaying an indication of the optical signal power in the optical signals to a system administrator.” As detailed above, none of the cited references, either alone or in combination, discloses or suggests a monitor which displays an indication of an optical signal power in optical signals. Thus, claim 12, along with claims 14, 15, 17, and 18, which

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<sup>2</sup> See Final Office Action mailed February 22, 2007, pages 3-4.

<sup>3</sup> *Id.* at page 4.

<sup>4</sup> *Ibid.*

<sup>5</sup> See *Alexander*, col. 5, ll. 32-35.

depend therefrom, is patentable over the cited references and the Applicants request that the rejection be withdrawn.

Claim 16 recites that “the optical tap diverts a portion of power from the optical signals.” The Applicants submit that none of the references, either alone or in combination, discloses or suggests that an optical tap diverts a portion of power from optical signals. In maintaining the rejection, the Patent Office asserts that an optical branching coupler 22 disclosed in *Sugaya* diverts a portion of power from optical signals.<sup>6</sup> The Applicants respectfully disagree. While *Sugaya* does disclose that the optical branching coupler 22 branches output light, nowhere does *Sugaya* disclose or even suggest that the optical branching coupler 22 diverts a portion of power from optical signals. Thus, in addition to the reasons noted above, claim 16 is patentable over the cited references and the Applicants request that the rejection be withdrawn.

Claim 24 recites that measuring power in a subset of optical signals using a power meter includes “combining the power of all of the optical signals in the subset.” Claim 25 includes similar features. The Applicants submit that none of the references, either alone or in combination, discloses or suggests that measuring power in a subset of optical signals includes combining the power of all of the optical signals in the subset. In maintaining the rejection, the Patent Office states that Figure 11 and the photodiode 31 disclose this feature.<sup>7</sup> The Applicants disagree. While *Sugaya* does disclose that photodiodes detect the power of light output by optical fiber amplifiers, *Sugaya* does not disclose that photodiodes combine the power of all optical signals in a subset.<sup>8</sup> Similarly, neither *Prohaska* nor *Alexander*, either alone or in combination, discloses or suggests this feature. Therefore, in addition to the reasons noted above, claims 24 and 25 are patentable over the cited references and the Applicants request that the rejection be withdrawn.

The present application is now in a condition for allowance and such action is respectfully requested. The Examiner is encouraged to contact the Applicants’ representative regarding any remaining issues in an effort to expedite allowance and issuance of the present application.

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<sup>6</sup> See Final Office Action mailed February 22, 2007, page 4.

<sup>7</sup> *Id.* at page 6.

<sup>8</sup> See *Alexander*, col. 2, ll. 6-9.

Respectfully submitted,

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